OKIPAGE 8w Lite

User's Guide

Preface

Every effort has been made to ensure that the information in this document is complete, accurate, and up to date. Oki assumes no responsibility for the results of errors beyond its control. Oki also cannot guarantee that changes in software and equipment made by other manufacturers and referred to in this guide will not affect the applicability of the information in it. Mention of software products manufactured by other companies does not necessarily constitute endorsement by Oki.

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Energy Star is a trademark of the United States Environmental Protection Agency.

Apple, Macintosh, Mac, MacOS and True Type are registered trademarks of Apple Computer Corporation.

Microsoft, MS-DOS and Windows are registered trademarks of Microsoft Corporation.

EEC compatibility

This product complies with the requirements of the Council Directives 89/336/EEC (amended by 92/31/EEC) and 73/23/EEC (amended by 93/68/EEC) on the approximation of the laws of the member states relating to electromagnetic compatibility and low voltage.

Energy Star

As an Energy Star Partner, Oki has determined that this product meets the Energy Star guidelines for energy efficiency.

Universal Serial Bus

This printer is fitted with an industry standard Universal Serial Bus (USB) data interface.

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Safety instructions

This printer has been carefully designed to give years of safe, reliable performance. As with all electrical equipment, however, there are a few basic precautions that should be taken to avoid personal injury or damaging the printer:

- Read this user's guide carefully and save it for future reference.
- Read and follow all warning and instruction labels on the printer itself.
- Disconnect the printer before cleaning. Use only a damp cloth. Do not use liquid or aerosol cleaners to clean the printer.
- Place the printer on a firm, solid surface. If the printer is placed on something unsteady, it may fall and become damaged or injure someone. If the printer is placed on a soft surface, such as a rug, sofa, or bed, the vents may become blocked causing the printer to overheat.
- Do not put the printer on or near a heat source, such as a radiator or heat register. Keep it out of direct sunlight. Allow enough room around the printer for adequate ventilation and easy access.
- Do not use the printer near water, or spill liquid of any kind into it.
- Make sure that the power source matches the rating listed on the back of the printer. If you are not sure, check with your dealer or with your local power company.
- This printer has an earthed plug as a safety feature and will only connect to an earthed outlet. If this plug cannot be connected to a power outlet, then it is possible that the power outlet is of the older, non-earthed type. Contact an electrician to have the power outlet replaced. Do not use an adapter to defeat the earthing.
- To avoid damaging the power cable, do not put anything on it or place it where it will be walked on. If the cable becomes damaged or frayed, replace it immediately.
- If an extension cable or power strip is being used with the printer, make sure that the total of the amperage rating required by all the equipment is less than the rating of the extension cable or power strip. The total ratings of all equipment

plugged into the outlet should not exceed 13 amperes.

- The power outlet into which the printer is connected must remain accessible at all times.
- Opening any cover may expose hot surfaces. These are clearly labelled. Do NOT touch them.
- Do not insert anything into the ventilation slots on the printer; you could get a shock or cause a fire.
- Aside from the routine maintenance described in this user's guide, do not try to service the printer yourself. Opening a cover may expose you to shocks or other hazards.
- Do not make any adjustments other than those outlined in this user's guide as damage may be caused to the printer.

If anything happens that indicates that the printer is not working properly or has been damaged, disconnect the printer from the power source and contact your dealer. These are some of the things to look for:

- The power cable or plug is frayed or damaged.
- Liquid has been spilled into the printer, or it has been exposed to water.
- The printer has been dropped, or the cabinet is damaged.
- The printer does not function normally when following the operating instructions.

Toner cartridge and image drum handling

- Leave unused toner cartridges and image drum units in their packages until needed. When replacing a toner cartridge or image unit, reuse the packaging to dispose of the old toner cartridge or image drum unit.
- Do not expose the toner cartridges and image drum units to light for more than five minutes. Never expose the green drum (inside the image drum unit) to direct sunlight.
- Always hold the image drum unit by the ends — never by the middle. Never touch the green drum inside the image drum unit.
- To avoid damage to the image drum unit, always use original toner cartridges.
- Exercise care when removing the toner cartridge. Do not let it touch your clothing or porous materials. The toner powder causes permanent stains.
- Small amounts of toner spilled on skin or clothing can be readily removed with soap and cold water. Using heated water will make removing the stain much more difficult.

Emergency first aid

- **IF TONER IS SWALLOWED:** Induce vomiting and seek medical attention. Never attempt to induce vomiting or give anything by mouth to a person who is unconscious.
- **IF TONER IS INHALED:** Take the person to an open area for fresh air. Seek medical attention.
- **IF TONER GETS IN THE EYES:** Flush eyes with large quantities of cool, NOT cold, water for a minimum of 15 minutes keeping eyelids open with fingers. Seek medical attention.

Paper

Paper and envelope types

The manufacturer of this printer recommends the following guidelines when selecting paper and envelopes for use in your printer:

- Paper and envelopes should be stored flat and away from moisture, direct sunlight and heat sources.
- Use a smooth finished paper such as copier or laser type paper with a Sheffield (smoothness) rating of 250 or less. If in doubt, please ask your paper supplier.
- Use envelopes designed for use in laser type printers.
- The use of heavily laid or textured paper will seriously impact on the life of the image drum.
- Do not use very smooth, shiny/glossy paper.
- Do not use heavily embossed headed paper.
- Avoid printing on both sides and putting paper through the printer twice.
- Avoid using paper with perforations, cut outs and ragged edges.
- Do not use envelopes with windows or metal clasps.
- Do not use envelopes with self sealing flaps.
- Avoid using damaged or curled envelopes.

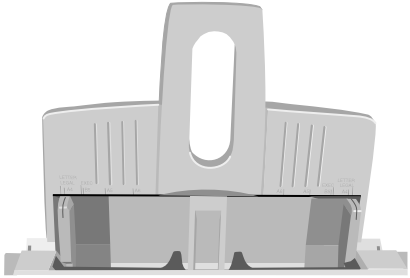
Transparencies and adhesive labels

The manufacturer of this printer recommends the following guidelines when selecting transparencies and adhesive labels for use in your printer:

- Always use manual feed.
- Media must designed for use in laser printers or photocopiers. Do not use media designed for use in colour laser printers and photocopiers.
- Must be able to withstand 200°C for 0.1 sec.
- Labels should cover entire carrier sheet.
- Carrier sheet or adhesive must not be exposed to any part of the printer.

Loading paper

1. Set the left paper guide to the marker for the required paper size and move the right guide to a position slightly wider than your paper width.



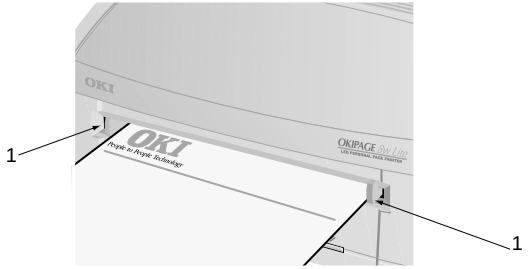
2. Insert the paper so that it is up against and flush with the left paper guide.
3. Adjust the right paper guide to fit snugly, but not tightly against the edge of the paper.
4. Lift the paper slightly out of the tray (about 1 cm) and allow it to drop back into place under its own weight. Do not force it down.

Note:
If using letterhead paper, insert the letterhead face down with the top first.

Manual feed

Use manual feed for envelopes, transparencies and other print media as follows:

1. Adjust the paper guides (1) to the width of the media being used.



2. Insert the media squarely into the paper guides to prevent skewing.

Note:
Insert envelopes with flap side down and to the left. Insert letterheaded paper face up with top of page first.

Paper output

Up to 30 sheets of paper (75 g/m^2) can be stacked in the output tray and the printed pages exit from the printer face up.

Print quality adjustments

The process used to fuse (fix) the printed image to the paper involves a mixture of pressure and heat. Too much heat will cause lightweight paper to crease or curl and corrugations in transparencies. Too little heat will cause the image not to fuse fully into heavyweight paper.

The print quality for different types of paper is set by default according to the paper size. If thinner or thicker paper is being used, the thickness setting can be adjusted as follows:

The settings for the various types of paper are given in the following table

Macintosh	Windows	Paper Weights
Thickest	Heavy	Postcard, envelope, OHP, labels, thick paper more than 90 g/m^2
Thicker	Medium heavy	Approx. 90 g/m^2
Thick	Medium	Approx. 75 to 90 g/m^2
Normal	Medium light	Approx. 55 to 75 g/m^2
Thin	Light	Approx. 55 g/m^2

Macintosh

1. Open the **Chooser** from the **Apple** menu.
2. Click on the printer icon that is being used, then click on the **Preferences** button.
3. Click on the **Print** button and then click on the **Advanced** button.
4. Click on the box next to **Thickness** and select the required thickness of paper.
5. Click on **OK** button, then **Preferences** button and finally the **OK** button.
6. Close the **Chooser.**

Windows

1. Start the status monitor.
2. Click on Printer Setup tab — Printer Menu button — Paper tab.
3. Click on the button for the paper tray being used.
4. Adjust the media type to the required setting and, if necessary, the paper size to the size of the paper being used.
5. Click on Apply button — Close button — OK button to set the printer to the new media type and printing quality.

   Note:
   Any printer settings selected in the status monitor will be overridden by software commands if the settings in the software are different from those selected in the status monitor.

Toner

When to replace toner cartridge

After the message Toner Low displays, the printer will print about 100 more pages, then display the message Toner Empty and stop printing. Printing will resume after a new toner cartridge has been installed.

CAUTION:
The use of original toner or toner cartridges is highly recommended. Using compatible or counterfeit toner or toner cartridges can seriously damage the printer.

Toner cartridge life

How long your toner cartridge lasts depends on the print density: the percentage of the page that prints black. A typical letter has 3% to 5% print density; graphics usually have higher density. Higher print density means toner is used up faster. At 5% print density, a toner cartridge will print an average of 1500 pages. Remember, this is only an average: actual results may vary.

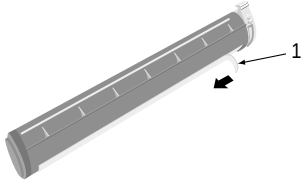
The first toner cartridge installed in a new printer has to fill the image drum reservoir and saturate the developing roller with toner. The first toner cartridge normally produces between 500 and 700 pages after installation.

Replacing toner cartridge

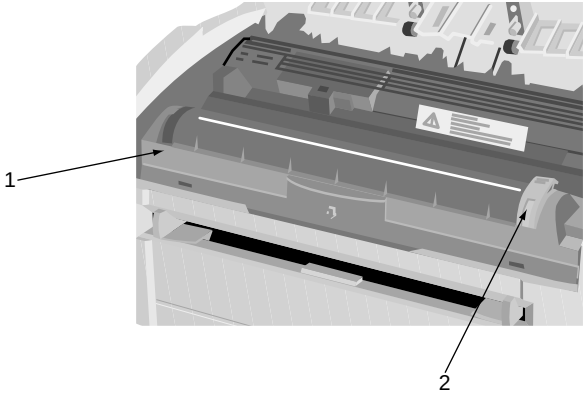
WARNING

Be careful when handling the toner cartridge. Do not let toner spill on your clothing or other porous materials.

1. Open the cover and remove the used toner cartridge.
2. Shake the new toner cartridge to distribute toner evenly.
3. Unwrap the new toner cartridge and carefully peel off the sealing tape (1).



4. Insert the cartridge into the printer, left end (1) first as illustrated.



5. Push the coloured tab (2) forward to release the toner into the toner hopper.
6. Using the cleaning pad that comes with the new toner cartridge, clean the LED array.
7. Close the top cover and press down to latch it closed.

Image drum

When to replace image drum

As the image drum approaches its end of life, a Change Drum message appears. Change the image drum when the print quality becomes faint or begins to deteriorate.

Image drum life

The life of an image drum depends on a number of factors, including temperature and humidity, the type of paper used, and the number of pages per job.

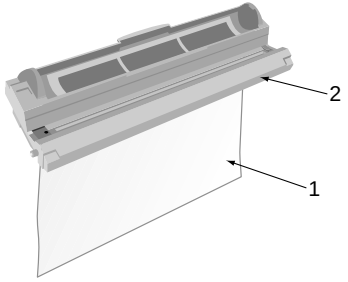
The image drum should last about 10,000 pages continuous printing and up to 8,000 pages at 3 pages per job (without power save). These numbers are approximate because different number of pages are printed each time and the environmental conditions and the paper type used may vary.

Replacing image drum

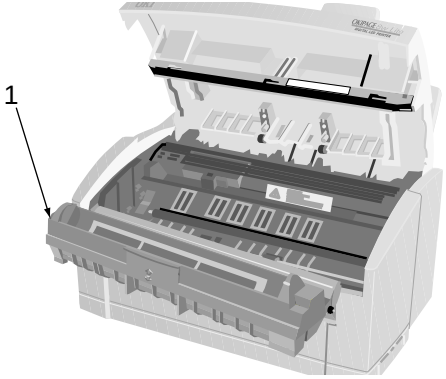
1. Open the cover and remove the used image drum.

CAUTION:
Never expose the image drum unit to light for more than 5 minutes. Never expose the image drum unit to direct sunlight. Always hold the image drum unit by the ends. Never touch the surface of the green drum inside the image drum unit.

2. Remove the new image drum from the package and remove the protective sheet (1) from the image drum (2).



3. Install the new image drum (1) into the printer placing the alignment pins on each end into the slots in the printer.



4. Remove the tape and shipping insert from the image drum.
5. Install a new toner cartridge. Refer to ‘Replacing toner cartridge’.
6. Close the top cover.
7. Reset the drum counter following the instructions given below.

Resetting drum counter

After replacing the image drum, reset the drum counter to keep a correct count of the number of pages printed on the image drum.

Macintosh

1. Click on **Print Desktop** from the **File** menu.
2. Click on the **Options** button.
3. Click on the **Reset Drum Counter: Reset** button.
4. Click on the **Save** button, then click on the **Cancel** button.

Windows

1. Enter the printer status monitor.
2. Click on the Printer Setup tab.
3. Click on the Printer Menu button.
4. Click on the Maintenance tab.
5. Click the Reset button next to “Drum Counter Reset”.

Fonts

What is a font?

A font refers to a set of printable characters in a particular typeface of a specific size (e.g. 12 point) and style (e.g. roman, bold or bold-italic). In computer printing, however, this term has been used in a wider context to refer to all sizes and styles of a particular typeface. In printers, fonts may be divided into two basic types: bitmap fonts and scalable (or outline) fonts.

Bitmap fonts are made up of a pattern of dots (at the printer resolution) to form the image of each printable character. These are of a fixed size and scaling makes them look ragged.

Scalable fonts are stored as a set of mathematical curves. At print time, the printer uses the stored curves to make up a bitmap of each character required, at the required size in the required style, at the full printer resolution. Such fonts are therefore said to be scalable and do not appear ragged at enlarged sizes.

Using fonts

The easiest way to select fonts is through the software program being used. Software programs send printer commands that consist of a set of codes, one for each of the font characteristics. If the software program has the appropriate driver, fonts can be specified and the necessary commands will be sent to the printer. For more detailed information on how to select fonts in a software program, refer to the documentation for that software program.

Printer maintenance

Transporting the printer

If you need to transport the printer to another location, including return for service, please take the following precautions:

1. Remove the toner cartridge and the image drum cartridge from the printer and seal in the black, light-proof bag provided.
2. Try to ensure that the printer remains the right way up during transportation to avoid spillage of any residual toner.

Generating a cleaning page

If the printer shows signs of fading, streaking or erratic marks, the problem may be cleared by generating a drum cleaning page as follows.

Macintosh

1. Click on **Print Desktop** from the File menu.
2. Click on the **Options** button.
3. Click on the **Cleaning Page: Print** button.
4. Insert a sheet of paper in the manual feed slot and click on the **Continue** button.
5. Click on the **Save** button, then click on the **Cancel** button.

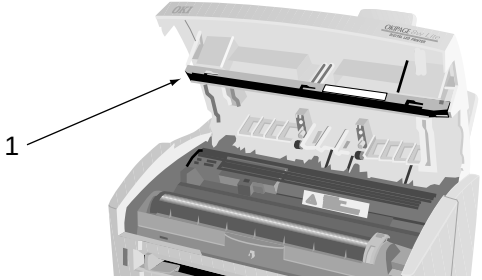
Windows

1. Enter the printer status monitor.
2. Click on the Printer Setup tab.
3. Click on the Printer Menu button.
4. Click on the Test Print tab.
5. Click the Cleaning button next to “Cleaning printer”.
6. Insert a sheet of paper in the manual feed slot.

Cleaning LED array

Clean the LED array whenever a new toner cartridge is installed; if there is faded vertical areas; light printing down a page.

Wipe the LED array (1) gently with the cleaning pad that came with the new toner cartridge or use an anti-static cleaning pad that is generally available for computer cleaning.



Troubleshooting

Paper jams

1. Remove any paper from the tray and clear any mis-fed sheets.
2. Open the cover.

WARNING
The fuser area will be hot. This area is clearly marked. Do not touch it.

CAUTION:
Never expose the image drum unit to light for more than 5 minutes. Never expose the image drum unit to direct sunlight. Always hold the image drum unit by the ends. Never touch the surface of the green drum inside the image drum unit.

3. Carefully lift out the image drum, complete with the toner cartridge. Be careful not to touch or scratch the green drum surface.
4. Remove any jammed sheets from the paper path.
5. Re-install the image drum, ensuring that it correctly locates into the slots on each side of the printer.
6. Close the top cover.
7. The printer will warm up and commence printing when ready. The page lost through the jam will normally be reprinted.

Print quality problems

Before consulting a service representative regarding a print quality problem, check the table below to see if there is a solution, or something you might have overlooked.

To verify print quality problems, try printing several pages to check that the problem is persistent.

Symptom	Problem	Solution
Blank sheets printed.	Image drum cartridge not properly installed.	Reinstall image drum cartridge.
	Empty or missing toner cartridge.	Install new toner cartridge.
Entire page prints faintly.	Empty toner cartridge. Pages get fainter when toner is used up.	Install new toner cartridge.
	LED array is dirty.	Clean LED array.
Page has grey background.	Static electricity, generally from dry environments, causes toner to stick to background.	Change paper to a smoother laser bond or use a humidifier.
Page prints all black.	Hardware problem.	Contact service.
Page has repetitive marks.	Damaged image drum cartridge causes repetitive marks every 1.6 inches (4.06 cm) due to surface nicks and scratches.	Generate a cleaning page, repetitive marks may be temporary.
Oblong area of faint print appears on each page.	Drop out caused by using paper exposed to high humidity.	Change paper stocks, check paper storage environment or use a dehumidifier; check toner level.
Vertical white streaking or faint areas on page.	Toner is low and does not distribute properly, or the drum is worn out.	Replace toner cartridge. Check drum and replace the drum, if necessary. Contact service.
	LED array is dirty.	Clean LED array.
Vertical black lines.	Hardware problem.	Contact service.
Fuzzy print.	LED array is dirty.	Clean LED array.
Faded print.	Toner cartridge is not correctly installed.	Install toner cartridge correctly.
Smeared or blotched print.	Dirty rollers; toner dropped inside printer or image drum problem.	Contact service.
Printed page is light/blurred.	Is toner low?	Replace toner cartridge.
	Is paper meant for laser printers?	Use recommended paper.
	LED array is dirty.	Clean LED array.
Bold characters and dark lines are smeared.	Toner is low.	Install new toner cartridge.
Print is darker than usual.	Darkness setting is too high.	Change darkness setting.

Symptom	Problem	Solution
Pages curl excessively.	Printing on wrong side of paper.	Turn paper over in tray. (Note arrow on paper package). Install paper print side down in tray.
	Moisture in paper. Improper storage.	Avoid storing paper in areas of excessive temperature and humidity. Store paper in protective wrapping.
	High humidity.	Recommended operating humidity: 20–80%

Software problems

Your software (operating environment, applications and printer drivers) controls the printing process. Make sure you have selected the right driver for use with your printer. See your software documentation for more information.

Symptom	Problem	Solution
Printing is garbled.	Incorrect driver is installed.	Install an appropriate driver.
Printer's output is below rated speed.	Much of the printing delays will be caused by your application. Sometimes purely text documents will print slowly depending on the selected fonts and how they are transferred to the printer.	For maximum speed, use text in your document with fewer fonts.

Hardware problems

Symptom	Problem	Solution
Graphic image prints partly on one page, partly on the next.	Insufficient printer memory for this image at this resolution.	Change the resolution, reduce the image size, or install more memory in your printer.
When you try to print nothing happens, but printer indicates it is ready to receive data.	Configuration error.	Check cable connection. If more than one printer is available, make sure your printer has been selected.
Garbage prints.	Incorrect cable configuration. Also, see Software Problems.	Check cable configuration, continuity, and length.
Odours.	Gases are given off by forms or adhesives passing through the hot fusing unit.	Make sure the forms you use can withstand heating, and provide adequate ventilation.
Printer is on but must warm up before a job is printed.	Power Save mode is set on to conserve energy. The fuser must heat up before you can begin printing the next job.	To eliminate warm up delay, change Power Save setting.

Specifications

Printning process:
LED array imaging to organic photoconductive drum at 8 pages per minute (ppm)

Power supply:

Voltage:	230V±10% to 240V ±10% AC
Frequency:	50/60Hz ±2%
Power Cable:	1.8m separate cable, terminated with country specific plug.

Physical:

Dimensions:	264 × 324 × 346mm (H × W × D)
Weight:	Approx. 4.2kg

Resolution: 300 × 300dpi

Power consumption:

Power Save:	8W
Idle:	32W
Normal:	160W
Peak:	560W

Memory:

RAM:	2Mb
ROM:	512Kb

Operating systems:
Macintosh OS version 8.1 upwards
Windows 3.1x, Windows 95/98, Windows NT4.0

Paper handling:

Input tray:	100 sheets (75g/m²)
Manual feed:	Single sheet, transparencies, labels and envelopes
Output tray:	30 sheets (75g/m²) face up
Paper weight:	
Input tray:	60–105g/m²
Manual feed:	60–120g/m² (envelopes 90 – 105g/m²)
Paper size:	
Input tray:	Legal 13, Legal 14, Letter, Executive, A4, A5, B5, A6
Manual feed:	Legal 13, Legal 14, Letter, Executive, A4, A5, B5, A6, C5, DL, Com-9, Com-10, Monarch, Free size (min 76 x 127mm, max 297 x 210mm), Labels, OHP

Product life:

- Duty: 30,000 pages or 5 years, max of 2,500 pages per month
- Reliability:
  - MTBF: 5,700 print hours at 2.3% duty
  - MTTR: 20 minutes or less
- Consumables:
  - Image drum: 10,000 pages (continuous)
  - Toner: 1500 pages at 5% density

Environment:

- Operating: 10 to 32°C at 20 to 80% humidity
- Non-operating: 0 to 43°C at 10 to 90% humidity
- Storage: -10 to 43°C at 10 to 90% humidity
- Noise:
  - Idle 36dBA
  - Operating: 50dBA
  - Standby: background level

Interface:

- USB port
- IBM Centronics (CEN 36) parallel port

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